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Walter Heath, M.A., Redcott, Cobham, Surrey (proposed by J. W. L. Glaisher);

John Charles William Herschel, B.A. Oxon, St. John's College, Cambridge, and Lawn Upton, Littlemore, near Oxford (proposed by Sir R. S. Ball);

Capt. Joseph W. Martyr, s.s. "Montrose," 1 The Glen, South Road, Forest Hill, S.E. (proposed by Campbell Hepworth);

Alfred Ernest Moore, B.A., B.Sc. Lond., Lecturer in Mathematics and Physical Science, St. John's College, Battersea, S.W. (proposed by A. Fowler);

John Netherclift Jutsum, Teacher of Navigation and Nautical Astronomy, Cardiff Nautical Academy, 47 St. Mary Street, Cardiff, S. Wales (proposed by Arthur Mee);

Thomas Marginson Nightingale, B.Sc., 375 Bridgeman Street, Bolton, Lancashire (proposed by A. Fowler); and

Richard Welford, Thornfield Villa, Gosforth, near Newcastle-on-Tyne (proposed by Cuthbert Hutchinson).

One hundred and eighty-eight presents were announced as having been received since the last meeting, including, amongst others:—

J. C. Adams, Scientific Papers, vol. ii., presented by the Adams Memorial Committee; Ch. André, Traité d'astronomie stellaire, 2me partie, presented by the author; Batavia, Natural History Society, Solar eclipse of 1901; information for observing parties, &c., presented by A. M. W. Downing; Groningen Astronomical Laboratory, publications Nos. 1–3, presented by the Laboratory; Leipzig, Astronomische Gesellschaft, Catalog der Sterne, Zone +10° bis +15° (Leipzig), presented by the Society; Lowell Observatory Annals, vol. ii., presented by Percival Lowell; Madrid Observatory, Observaciones del eclipse total 1900 in Plasencia, presented by the Observatory; E. W. Maunder, The Royal Observatory, Greenwich, presented by the publishers; Princeton University, Report of the eclipse expedition, 1900, presented by C. A. Young; Washington, American Ephemeris Papers, vol. v., pts. 1, 2; vol. viii., pt. 1 (Newcomb, Perturbative Function, Inequalities of long period, Precessional Constant), presented by the Ephemeris Office. Carte photographique du ciel, 70 charts, from photographs taken at the Observatories of Algiers, Paris, Toulouse, and San Fernando, presented by the Paris and San Fernando Observatories; Collection of astronomical drawings (Moon and planets) by the late N. E. Green, presented by Miss Green; Photographs of the total solar eclipse, 1900 May 28, presented by C. Burckhalter; Photographs of the Sun and of the solar eclipse, 1900 May 28 (partial

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phase), presented by G. J. Newbegin; Photographs of instruments for eclipse observations and enlarged photograph of the transit of *Venus*, 1882, presented by D. P. Todd: Portrait of the late Professor J. E. Keeler, presented by the Lick Observatory; Small equatorially mounted telescope, formerly belonging to the late Mr. B. T. Moore, presented by Miss Moore.

Mean Areas and Heliographic Latitudes of Sun-spots in the year 1899, deduced from Photographs taken at the Royal Observatory, Greenwich, at Dehra Dûn (India), and in Mauritius.

(*Communicated by the Astronomer Royal.*)

The results here given are in continuation of those printed in the *Monthly Notices*, vol. lx. p. 157, and are deduced from the measurements of solar photographs taken at the Royal Observatory, Greenwich; at Dehra Dûn, India; and at the Royal Alfred Observatory, Mauritius.

Table I. gives the mean daily areas of umbræ, whole spots, and faculæ for each synodic rotation of the Sun in 1899; and Table II. gives the same particulars for the entire year 1899 and the ten preceding years, for the sake of comparison. The areas are given in two forms: first, projected areas—that is to say, as seen and measured on the photographs, these being expressed in millionths of the Sun's apparent disc; and next, areas as corrected for foreshortening, the areas in this case being expressed in millionths of the Sun's visible hemisphere.

Table III. exhibits for each rotation in 1899 the mean daily area of whole spots, the mean heliographic latitude of the spotted area, and the mean distance from the equator of all spots; and Table IV. gives the same information for the year as a whole similar results from 1889 to 1898 being added, as in the case of Table II. Tables II. and IV. are thus in continuation of the similar tables for the years 1874 to 1888, on pp. 381 and 382 of vol. xlix. of the *Monthly Notices.*

The rotations in Table I. and Table III. are numbered in continuation of Carrington's series (*Observations of Solar Spots made at Redhill*, by R. C. Carrington, F.R.S.), No. 1 being the rotation commencing 1853 November 9. The assumed prime meridian is that which passed through the ascending node at mean noon on 1854 January 1, and the assumed period of the Sun's sidereal rotation is 25·38 days. The dates of the commencement of the rotations are given in Greenwich civil time, reckoning from mean midnight.

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